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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,207	08/10/2001	Robert MacArthur	EMC01-25(01058)	6994

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David E. Huang, Esq.
CHAPIN & HUANG, L.L.C.
Westborough Office Park
1700 West Park Drive
Westborough, MA 01581

EXAMINER

BONZO, BRYCE P

ART UNIT	PAPER NUMBER
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2114

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/928,207

Applicant(s)

MACARTHUR ET AL.

Examiner

Bryce P Bonzo

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-14,16-18 and 20-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6,8-14,16,17 and 22-28 is/are allowed.
- 6) ☒ Claim(s) 18,20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to:
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL OFFICIAL ACTION

Status of the Claims

Claims 7, 15 and 19 are cancelled by Applicant.

Claims 18, 20 and 21 are rejected under 35 USC §103.

Claims 1-6, 8-14, 16, 17 and 22-28 are allowed.

Rejections under 35 USC §103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brant (United States Patent No. 5,708,771) in view of Kuruma (United States Patent No. 6,018,204).

As per claim 18, Brant discloses:

operating a first power assembly to power the critical circuitry and a first section of the non-critical circuitry (column 9, lines 23-33);

operating a second power assembly to power the critical circuitry and a second section of the non-critical circuitry (column 9, lines 23-33);

in response to a failure of the second power assembly, continuing to power the critical circuitry and the first section of the non-critical circuitry using the first power supply (column 9, lines 23-33);

in response to a failure of the first power assembly, continuing to power the critical circuitry and the second section of the non-critical circuitry using the second power supply (column 9, lines 23-33).

Brant does not explicitly disclose:

the first power assembly being equipped with A+X power supplies and being configured to continue to operation when up to X power supplies of the A+X power supplies individual fail (Kuruma column 2, lines 52-64 where $N=A$ and $M=X$);

the second power assembly being equipped with B+Y power supplies and being configured to continue to operation when up to Y power supplies of the B+Y power supplies individual fail (Kuruma column 2, lines 52-64 where $N=B$ and $M=Y$);

failure of more than Y power supplies (Kuruma discloses this as the number of faulty power supplies being larger than M, column 12, lines 34-48);

failure of more than x power supplies (Kuruma discloses this as the number of faulty power supplies being larger than M, column 12, lines 34-48).

Kuruma provides for high end power supplies in mission critical devices (high maintainability and availability; column 1, lines 53-55). Kuruma additionally discloses the need for redundant power supplies which operate as single power source (column 1, lines 4-8). Brant is geared towards high availability in a large memory system which incorporates multiple power supplies. Any device in Brant which can be duplicated is

duplicated. As, Brant discloses and makes effective use of redundancy, the use of Kuruma to provide is clear as Kuruma discloses mechanisms to provide redundancy within the power supplies of Brant. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the multiple power sub assemblies of Kuruma into each of the main power assemblies of Brent, therefore creating a more fault tolerant power platform in which each power assembly would be able to sustain failures before removal.

As per claim 20, Brant discloses:

interconnecting the first and second power assemblies through a switch to voltage balance outputs of the first and second power assemblies (Figure 4, items 71-74 combine to form a diode based on/off switch for voltage to the device).

As per claim 21, Brant discloses:

connecting a first set of main power line connectors to connect to a first main power feed (Figure 4, item 48), and

connecting a first set of auxiliary power line connectors to connect to a first auxiliary power feed (Figure 4, item 47), and

connecting a second set of main power line connectors to connect to a second main power feed (Figure 4, item 52), and

connecting a second set of auxiliary power line connectors to connect to a second auxiliary power feed (Figure 4, item 47).

Response to Applicant's Arguments

As per claims 1-6, 8-14, 16, 17 and 22-28, these claims are allowed. The arguments are moot.

As per claims 18, 20 and 21 are rejected on new grounds due to a change in scope. Every limitation of claim 19 was not incorporated into claim 18, and therefor this action is being made final. The following limitation is not present in the current form of claim 18: *performing a second error handling procedure to discontinue providing power to the critical circuitry and to the first section of the non-critical circuitry using the second power assembly when more than Y second power supplies fail.*

Allowable Matter

Claims 1-6, 8-14, 16, 17 and 22-28 are allowed.

Final Disposition

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

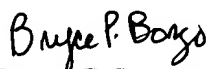
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryce P Bonzo whose telephone number is (571)272-3655. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Bryce P Bonzo
Examiner
Art Unit 2114